



Practitioner's Docket No. 1588-34

PATENT

CR/1724  
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11-30-00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: MCKINNEY, Jerry L.

Application No.: 0 9 / 617,749

Filed: July 17, 2000

Group No.: 1724

For: CURRENT AND AERATION Examiner:

SYSTEM FOR WASTEWATER PLANT

Current status and location of application (if known):

applied for reissuance, published notice on 09/05/00

**Assistant Commissioner for Patents**

**Washington, D.C. 20231**

**ATTENTION:** Director of Examining Group 1720

Richard V. Fisher

**NOTE:** Section 1901.03 of the M.P.E.P., 7th ed. points out:

*Where a protest is directed to a reissue application for a patent which is involved in litigation, the outside envelope and the top right hand portion of the protest should be marked with the words "REISSUE LITIGATION." The notations preferably should be written in a bright color with a felt point marker. Any "REISSUE LITIGATION" protest mailed to the Office should be so marked and mailed to BOX 7. However, in view of the urgent nature of most "REISSUE LITIGATION" protests, protestor may wish to hand-carry the protest to the appropriate area in order to ensure prompt receipt and avoid any unnecessary delays. In litigation-type cases, all responses should be hand carried to the appropriate area in the Office.*

**PROTEST UNDER 37 C.F.R. § 1.291(a)**

**IDENTIFICATION OF APPLICATION**

1. This is a protest against the above identified

☐ pending application.

☒ reissue application. of U.S. Patent No. 5,785,854

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## LISTING OF INFORMATION RELIED ON

NOTE: Any information which, in the protestor's opinion would make the grant of a patent improper can be relied on in a protest under 37 C.F.R. § 1.291(a); M.P.E.P. § 1901.02, 6th ed.

NOTE: 37 C.F.R. § 1.291 does not permit protestor to complete an incomplete protest, nor to further participate in, or inquire as to the status of, any Office proceedings relating to the initial protest. M.P.E.P. § 1901.03, 7th ed.

2. Listed below are the patents, publications or other information relied upon.

(where applicable complete the next item)

- ☐ Form PTO-1449 (PTO/SB/08A and 08B), listing the patents and publications, is also attached.

- Exhibit 1: Prior Art Publication;  
"Biological Wastewater Treatment: Theory and Applications" by C.P.  
Leslie Grady, Jr. and Henry C. Lim, 1980; selected excerpts from this  
textbook
- Exhibit 2: Prior Art Patent  
U.S. Patent No. 4,983,285
- Exhibit 3: Prior Art Patent  
U.S. Patent No. 3,883,427
- Exhibit 4: Protest Document  
Pending Litigation Letter from Applicant to Protestor

All checked  
CTB  
11/10/00

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**RELEVANCE OF LISTED ITEMS**

3. A concise explanation of the relevance of each listed item follows:

(See Attached Pages)

*(use added page(s), if necessary)*

Number of pages added \_\_\_\_\_

(Protest under 37 C.F.R. § 1.29(a) [9-31]—page 3 of 5)

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### COPIES OF LISTED ITEMS

4. A copy of each listed patent or publication or other item of information in written form, or at least the pertinent portions thereof, is attached.

### ENGLISH TRANSLATION(S)

*(complete if applicable)*

5. ☐ An English language translation of all the necessary and pertinent parts of any non-English language patent, publication or other item of information relied upon, is attached.

### SERVICE OF PAPERS

NOTE: "Every effort should be made by a protestor to effect service of the protest upon the attorney or agent of record or upon the applicant if no attorney or agent is of record. Of course, the copy served upon applicant or upon applicant's attorney or agent should be a complete copy including a copy of each prior art or other document relied upon in the same manner as required by 37 C.F.R. § 1.291(a) for the Office copy. The protest filed in the Office should reflect, by an appropriate 'Certificate of Service,' that service has been made as provided in 37 C.F.R. § 1.291(a). Only in those instances where service is not possible should the protest be filed in duplicate in order that the Office can attempt service." M.P.E.P. § 1901.03, 7th ed.

NOTE: "Proof of service may be made by (1) An acknowledgement of service by or on behalf of the person served or (2) a statement signed by the attorney or agent conveying the information required by this section." 37 C.F.R. § 1.248.

*(complete (a) or (b) below, as appropriate)*

6. (a) ☒ Service of a complete copy of these papers was made by depositing a copy (copies) of these papers with the United States Postal service on \_\_\_\_\_, each with sufficient postage as first class mail in an envelope(s) addressed to the following:

*(list below each practitioner and/or inventors together with the address for each)*

C. James Bushman  
Browning Bushman  
5718 Westheimer, Suite 1800  
Houston, Texas 77057

- (b) ☐ Service was not possible, for the reason set forth below, and, therefore, a duplicate of the complete protest papers is forwarded herewith

(set forth reasons for inability to serve)



### ACKNOWLEDGEMENT OF PROTEST BY PTO

NOTE: "A member of the public filing a protest in an application under paragraph (a) of this section will not receive any communications from the Office relating to the protest, other than the return of a self-addressed postcard which the member of the public may include with the protest in order to receive an acknowledgment by the Office that the protest has been received." . . . 37 C.F.R. § 1.291(c).

7. (complete the following applicable item(s))

- ☒ Please acknowledge receipt of this protest by stamping and returning the attached self-addressed postcard.
- ☒ Please also acknowledge entry of this protest in the reissue application file.

### IDENTIFICATION OF PROTESTOR

NOTE: Any member of the public, including both private persons, corporate entities, and government agencies, may file a protest under 37 C.F.R. § 1.291. A protest may be filed by an attorney or other representative on behalf of an unnamed principal because § 1.291 does not require that the principal be identified. M.P.E.P. § 1901.01.

Date: Oct 26, 2000

Hydro-Action, Inc.

(type or print name of protestor)

(complete if applicable)

Reg. No.: 46,625

Tel. No.: ( 713 ) 223-4034

Customer No.: 24106

Andrew W. Chu

Signature of Protestor

Andrew W. Chu

Attorney for Protestor

P.O. Address

Harrison & Egbert

1018 Preston St., Suite 100

Houston, Texas 77002

☐ Plus added page(s) \_\_\_\_\_

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: MCKINNEY, Jerry L.

SERIAL NO.: 09/617,749

ART UNIT: 1724

FILED: July 17, 2000

EXAMINER:

TITLE: CURRENT AND AERATION SYSTEM FOR WASTEWATER PLANT

STATEMENT OF RELEVANCE FOR LISTED ITEMS  
FOR A PROTEST UNDER 37 C.F.R. § 1.291(a)

Assistant Commissioner for Patents  
Washington, D.C. 20231

ATTENTION: Director of Examining Group 1720  
Richard V. Fisher

Sir:

In conjunction with the filing of a Protest Under 37 C.F.R. § 1.291(a), a protest being due by November 5, 2000, please consider the following concise explanations of the relevance of each listed item in the Protest as follows:

- Exhibit 1: Prior Art Publication;  
"Biological Wastewater Treatment: Theory and Applications" by C.P.  
Leslie Grady, Jr. and Henry C. Lim, 1980; selected excerpts from this  
textbook
- Exhibit 2: Prior Art Patent  
U.S. Patent No. 4,983,285
- Exhibit 3: Prior Art Patent  
U.S. Patent No. 3,883,427
- Exhibit 4: Protest Document  
Pending Litigation Letter from Applicant to Protestor

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### EXPLANATION OF RELEVANCE

Exhibit 1: Prior Art Publication;  
"Biological Wastewater Treatment: Theory and Applications" by C.P.  
Leslie Grady, Jr. and Henry C. Lim, 1980; selected excerpts from this  
textbook Prior Art Publication

#### Excerpt A: pages 6-7

In the above-identified excerpt of the Biological Wastewater textbook from 1980, the authors disclose a wastewater treatment system having a tank with a bottom-located aerator and constant stirring. In fact, Illustration A-1 of Figure 1.1 on page 6 of the textbook graphically illustrates the placement of the aerator/stirring device in the wastewater. The description on page 7 further indicates that a "continuous stirred tank reactor" is a common embodiment in wastewater treatment systems.

#### Excerpt B: pages 365-366

In this excerpt, the textbook discusses the use of continuous stirred reactor tanks in aerobic digestion and other biochemical operations. The system includes an inflow, outflow, mixer/aerator and current flow. This passage introduces the use of the stirring and current in aerobic digestion by bacteria.

#### Excerpt C: pages 689-690

The use of bubbles for aeration is introduced in the description of aerobic digestion tanks. The "mixing and oxygen transfer" is accomplished by bubble aeration using air or pure oxygen.

Consequently, the textbook shows that complete mixing in the tank by bubbles has been known since at least 1980.

Excerpt D: page 700

In this excerpt, the design of wastewater treatment tank is addressed in terms of the mathematical formula used to describe the power needed to maintain mixing in the tank. Additionally, the textbook provides a special formula for relating air flow and mixing and aeration when bubble diffusion is used in a tank.

As such, these excerpts are relevant to form a 35 U.S.C. §102(a)/103 rejection of the present reissue application. The prior art publication is a textbook from 1980, and this textbook discloses all of the elements of the Applicant's invention, such as bottom placement of the aerators and mixers, bubble diffusers and production of current flow. Current flow caused by aeration bubbles is well known in wastewater treatment systems, as evidenced by the fact that a mathematical formula has been used since at least 1980 to calculate the amount of air needed to produce an amount of bubbles for mixing. Furthermore, an aeration area has been disclosed by the discussion of the placement of mixers/aerators in aerobic digestion tanks to provide air to the bacteria.

Exhibit 2: U.S. Patent No. 4,983,285

U.S. Patent No. 4,983,285, issued to Nolen on January 8, 1991, teaches an individual wastewater treatment plant. The plant comprises the inverted cone-shaped clarifier compartment suspended in an outer tank. U.S. Patent No. 4,983,285 is relevant to a 35 U.S.C. §102(a)/103



rejection because the tank described in the Nolen patent is the same as the tank in the reissue application. Both tanks have inverted cones with deflector cones on the bottom of the tank. Thus, the reissue application fails to include any inventive aspect, which could control current flow differently as compared to the prior art. The original application argued that the placement of diffusers in close proximity could control the current flow in the tank, and this element should not be removed from the claim language. The terms "aeration area" and "injection area" are vague and indefinite and improperly broaden an element of Applicant's invention.

Exhibit 3: U.S. Patent No. 3,883,427

U.S. Patent No. 3,883,427, issued to Oldham et al. on May 13, 1975, describes a floating solids return device. The sewage treatment system teaches a series of tanks for settling solids and for processing wastewater, including an aeration chamber. The system further includes an aeration device which bubbles air into the wastewater from the bottom of the aeration chamber. U.S. Patent No. 3,883,427 is relevant to a 35 U.S.C. §102(a)/103 rejection because the aerators are the same air injection devices described in the reissue application. Dispersing air bubbles from the bottom of the tank is not novel and is obvious. When considered with other prior art, the reissue application should be rejected because the proposed amendments remove the inventive aspect of the original patent.

Exhibit 4: Pending Litigation Letter from Applicant to Protestor

The Pending Litigation Letter from Applicant to Protestor is relevant to rejections based upon 35 U.S.C. §102(g) and information indicating inequitable conduct issues. A rejection based upon 35 U.S.C. §102(g) is proper because Applicant admits on Page 2, lines 21-24 that U.S. Patent No.

5,785,854 does not cover the products of the Protestor and that Applicant has applied for a reissue in order to expand the claims to cover the products. Thus, the amended version of the claims are intended to cover products which are actually the invention of the Protestor. A 35 U.S.C. §102(g) rejection is proper because the Applicant has not indicated the Protestor as a co-inventor or as a sole inventor. The Applicant drafted the claims only after reverse engineering the products of the Protestor, which have been on sale in the United States for over one year. Second, a rejection based on inequitable conduct is proper because Applicant has violated the duty to disclose, 37 C.F.R. § 1.56(b). See MPEP § 2001.06(c). In the reissue application, Applicant failed to indicate the existence of the current and pending litigation of the subject matter and failed to provide material information from the litigation relating to the validity of the reissue application.

Respectfully submitted,

Oct 26 2000  
Date





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